

1 [0061]

ABSTRACT OF THE DISCLOSURE

2 [0062] We have discovered that the formation of particulate inclusions at the surface
3 of an aluminum alloy article, which inclusions interfere with a smooth transition from
4 the alloy surface to an overlying aluminum oxide protective film can be controlled by
5 maintaining the content of mobile impurities within a specific range and controlling the
6 particulate size and distribution of the mobile impurities and compounds thereof; by
7 heat-treating the aluminum alloy at a temperature less than about 330 °C ; and by
8 creating the aluminum oxide protective film by employing a particular electrolytic
9 process. When these factors are taken into consideration, an improved aluminum oxide
10 protective film is obtained.

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